

# **Department of Environmental Quality**

To protect, conserve and enhance the quality of Wyoming's environment for the benefit of current and future generations.





Todd Parfitt, Director

November 15, 2017

Mr. Doug Benevento Administrator, EPA Region 8 1595 Wynkoop St. Denver, CO 80202

Re: Initial Notification of PM<sub>10</sub> Exceptional Event on November 29, 2016

Dear Mr. Benevento,

Attached is the initial notification of a high wind blowing dust exceptional event that occurred in southern Campbell County on November 29, 2016 that led to exceedances of the 24-hour PM<sub>10</sub> NAAQS at one (1) industrial monitor. The Wyoming Department of Environmental Quality – Air Quality Division (AQD) has evaluated the initial notification and circumstances surrounding the event and represents that it should be evaluated by Region 8 as a possible exceptional event.

The AQD would like to request that the Administrator determine this possible event meets the provisions of 40 CFR 50.14 (a) (1) (F) as a regulatory determination made on a case by case basis. The AQD considers this event to be of regulatory significance because of the AQD's reliance on ambient data to determine compliance with the NAAQS at Powder River Basin (PRB) mines, the use of ambient data in AQD's permitting process, and the outstanding WildEarth Guardians Petition to make the PRB a PM<sub>10</sub> non-attainment area. These reasons demonstrate the need to accurately portray anthropogenic versus nonanthropogenic or "exceptional" air quality issues to the public by means of excluding exceptional event concurred data from the data record.

In 1993 the AQD and EPA Region 8 signed a Memorandum of Agreement (MOA) to rely on ambient monitoring data at PRB coal mines to determine compliance with the 24-hour PM<sub>10</sub> NAAQS under AQD's permitting process, rather than modeling potential 24-hour PM<sub>10</sub> impacts. The exceedance that the AQD is requesting Region 8 to review occurred at a PRB coal mine monitor that is covered under this MOA. The AQD is required to report this data to EPA Region 8, which is accomplished through EPA's AQS database and the annual PRB Network Review required by the AQD-EPA Performance Partnership Agreement (PPA). Because the effectiveness of the MOA is contingent on the lack of PM<sub>10</sub> NAAQS violations in the PRB, correctly reporting these data to EPA and AQS by placing exceptional event flags on these data is essential. The Region must take the appropriate steps to review and issue concurrence or non-concurrence on these data to accurately reflect the design value statistics in AQS and therefore accurately represent compliance with the NAAQS per the MOA.

As mentioned above, the AQD relies on ambient industrial PM<sub>10</sub> data at coal mines to determine compliance with the 24-hour NAQS in the permitting process. It is critical that exceedances and

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violations of the NAAQS are properly characterized in the permit analysis as being anthropogenic or exceptional in nature. The AQD cannot issue a permit to a source that will cause or contribute to a violation of the NAAQS. For mines that cannot model their potential permitting action, the AQD must rely on the ambient data record to prove compliance with the NAAQS. In order to rely on these monitoring data for permitting actions, Exceptional Events must be properly characterized in the data record and must be documented to EPA per 40 CFR 50.14.

In 2011 Wild Earth Guardians submitted a petition to the EPA regarding areas in the west that were violating the 24-hour PM<sub>10</sub> NAAQS and compelling the EPA to designate these areas as non-attainment. The petition was updated in 2013. The petition referenced data from AQS for Wyoming that had exceptional events flagged by the AQD, but which had not been acted on by the EPA. Among the monitors identified were those in the PRB that also had as yet un-concurred exceptional events flags. It is AQD's understanding the EPA has not yet responded to this petition. In order to avoid the stated consequences of the petition, namely the designation of Campbell County as a non-attainment area and triggering a revision of Wyoming's relevant State Implementation Plan (SIP), it is imperative that EPA agree to review the potential exceptional events demonstrations to accurately reflect the design values of monitors named in this petition and any other monitors that could currently be considered to be violating the NAAQS.

It is also the AQD's stance that any exceedance caused by an exceptional event is significant and that it is important to demonstrate to the public the difference between exceedances that are anthropogenic versus those that are non-anthropogenic or exceptional in nature. Properly characterizing these exceedances in the public record and providing scientific evidence supporting the claim of exceptionality is essential to our shared role of serving the public. These data are used by the public, researchers, and other public agencies to make scientific, public health, and policy decisions. These data must be properly flagged and concurred with in the EPA's AQS in order for those data to be handled correctly. Without the critical step of determining concurrence, data is often misused by these entities to support decisions.

Due to the above mentioned factors, the AQD considers these exceedances to meet the criteria of regulatory significance and requests that the Administrator make a determination under 40CFR 50.14 (a) (1) (F) that the EPA will agree to review an Exceptional Event demonstration for these events.

Please contact Cara Keslar, Monitoring Section Supervisor, with questions at 307-777-8684.

Sincerely,

Nancy E. Vehr

Administrator, Air Quality Division

Cc: Cara Keslar, AQD

Phil Dinsmoor, Peabody Coal

Ronn Smith, IML

### **EE Initial Notification Summary Information**

## PM<sub>10</sub> Template

Submitting Agency: State of Wyoming – Air Quality Division

Agency Contact: Cara Keslar

Date Submitted:

Applicable NAAQS: 24-Hour PM<sub>10</sub> (1987)

Affected Regulatory Decision<sup>1</sup>: (AQD will fill this section out)

(for classification decisions, specify level of the classification with/without EE concurrence)

Area Name/Designation Status: Attainment/Unclassifiable Design Value Period (list three year period): 2014-2016

(where there are multiple relevant design value periods, summarize separately)

#### A) Information specific to each flagged monitor day that may be submitted to EPA in support of the affected regulatory decision listed above

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Date of Event	Type of Event (high wind, volcano, wildfires/prescribed fire, other <sup>2</sup> )	AQS Flag	Monitor AQS ID (and POC)	Monitor Name	Exceedance Concentration (with units)	Notes (e.g. event name, links to other events)
11/29/2016	High wind	RJ	56-009-0088-1	NARM NA-8	299.6 μg/m³	NARM High Wind Dust Exceptional Event Demonstration: Nov 29, 2016, not yet submitted to EPA
11/18/2015	High wind	RJ	56-009-0088-1	NARM NA-8	266.7 μg/m <sup>3</sup>	NARM High Wind Dust Exceptional Event Demonstration: Nov 18, 2015, submitted to EPA but no concurrence
3/28/2015	High wind	RJ	56-009-0088-1	NARM NA-8	276.1 μg/m³	NARM High Wind Dust Exceptional Event Demonstration: Mar 28, 2015, submitted to EPA but no concurrence

#### B) Violating Monitors Information

(listing of all violating monitors in the planning area, regardless of operating agency, and regardless of whether or not they are impacted by EEs)

Monitor (AQS ID and POC)	Design Value ( <u>without</u> EPA concurrence on any of the events listed in table A above)	Design Value (with EPA concurrence on all events listed in table A above)
NARM NA-8 (56-009-0088-1)	1.0	0.0

<sup>&</sup>lt;sup>1</sup> designation, classification, attainment determination, attainment date extension, or finding of SIP inadequacy leading to SIP call

<sup>&</sup>lt;sup>2</sup> Provide additional information for types of event described as "other"

### C) Summary of Maximum Design Value (DV) Monitor Information (Effect of EPA Concurrence on Maximum Design Value Monitor Determination)

(Two highest values from Table B)

Maximum DV monitor (AQS ID and POC) without EPA concurrence on any of the events listed in table A above	Design Value 1.0	Design Value Monitor 56-009-0088	Comment
Maximum DV monitor (AQS ID and POC) with EPA concurrence on all events listed in table A above	Design Value 0.0	Design Value Monitor 56-009-0088	Comment

D) List of any monitors (AQS ID and POC) within planning area with invalid design values (e.g. due to data incompleteness)